



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/560,155

12/09/2005

Yasushi Washio

SHIGA7.034APC

9483

20995 7590 01/18/2007
KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER

LE, HOA VAN

ART UNIT

PAPER NUMBER

1752

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
----------------------------------------	-------------------	---------------

3 MONTHS

01/18/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 01/18/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcarter@kmob.com
eOAPilot@kmob.com

Office Action Summary

Application No.

10/560,155

Applicant(s)

WASHIO ET AL.

Examiner

Hoa V. Le

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

This is in response to Papers filed on 20 December 2006.

I. The record shows that applicants have to amend the claims in response to the Office action mailed on 25 September 2006. Accordingly, from now and on any Office action is properly made final.

II. In view of the amendment to the claims filed on 20 December 2006, the applied secondary reference with respect to Tani et al (5,300,404) on the record has been withdrawn.

III. Kanda (2003/0091732) is newly found for the teachings and suggestions of the newly amended embodiments in the claims. It is applied in the next paragraph.

IV. Claims 1 and 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al (5,985,525) considered in view of Kanda (2003/0091732).

Sato et al disclose, teach and suggest a developer composition and its use. The composition comprising an organic quaternary ammonium base and ammonium salt(s) of alkyl diphenyl ether sulfonic acid(s). Please see the whole

Art Unit: 1752

disclosure of each of the applied references, especially in Sato et al at col.2:11 to 3:55, 4:35-60, 5:12-16 and Examples.

Sato et al discloses, teach and suggest an inclusion of known additives but fail to specify low alcohol and its amount. However, it is known in the art to use (1) from about 1.0 to 20 wt% of methanol and/or ethanol being based on from about 0.01 to 10.0 wt% of a surfactant for the advantage of rapidly dissolving a surfactant in an aqueous solution or (2) a mixture of methanol and/or ethanol as an organic solvent and water in a ratio of from about 1 to 99 for the advantage of rapidly dispersing an organic material in a soft portion of a photopolymer layer on a developing photoresist layer in the art. Evidence can be seen in at least Kanda at paragraph 0003, 0004, 0005, 0011, 0016, 0018, 0027 and claim 8.

Since the above references are generally related to developer, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use, include or cited the use of methanol and/or ethanol for a reasonable expectation obtaining the advantages of rapidly dissolving a surfactant in an aqueous solution and/or rapidly dispersing an organic material in a soft portion of a photopolymer layer on a developing photoresist layer in the art as disclosed, taught and suggested in Kanda.

Applicant's arguments filed 20 December 2006 have been fully considered but they are not persuasive.

In view of the amendment filed on 20 December 2006, the above rejection is applied with a new set of the references. Accordingly, the arguments filed on 20 December 2006 has little value to the newly applied set of the references.

V. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

Art Unit: 1752

will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

VI. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa V. Le whose telephone number is 571-272-1332.

The examiner can normally be reached from 6:30 AM to 4:30 PM on Monday through Thursday and about the same time of most Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526.

Applicants may file a paper by (1) fax with a central facsimile receiving number 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private

Art Unit: 1752

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoa V. Le
Primary Examiner
Art Unit 1752

HVL
08 January 2007

HOA VAN LE
PRIMARY EXAMINER
